T&E GOLD STANDARD PROCESS FLOW

Version 2.0, October 1, 2004

DEFINE IT Requirements defined via CCD's, case files, 1.1 Description of Modification PTR/HDRs,etc Requirements/Performance baseline updated as 1.2 Scope of Delivery Defined via Stakeholder Prioritization Define required 1.3 Safety Management System Assessment Scope of delivery defined by stakeholder 1.4 System/Project Development Plan, or Equivalent prioritization 1.5 Requirements Review/Baseline Performance Specification Safety Risk Management assessment completed 1.6 Test Tool and Test Environment Specification identify potential impact 1.7 Provide Key Site Capability Criteria Define Key Site requirements and identify potential 1.8 Verify Information Systems Security candidate sites Verify that Information System Security considerations have been addressed **DESIGN IT** 2.1 Design Review Complete Including Input From Stakeholders Develop procedures, processes, and mapping for Design 2.2 Address Potential Impact & Implementation Issues applicable activities 2.3 Development Test Activities Planned and Documented Design review completed including input from 2.4 Test Tool Development stakeholders 2.5 Test Environment Upgrades Address potential Impact & Implementation issues Development test activities and test tools planned and documented 3.1 Functional Unit Test(s)/First Article Test/Prototype Test 3.2 Failure/Discrepancy Report(s) **BUILD IT** 3.3 Development Test Report Build 3.4 System/Project Test Plan Iterative process at sub-system level 3.5 Baseline Established/Development Documentation Ensures new function works and interrelated 3.6 Finalize Key Site Selection and Suitable Alternate functions are not affected 3.7 Coordinate User Demos Limited stakeholder/user demos (as required) 3.8 Develop Key Site Test Plan Select Key Site and alternate with a Site Selection Memorandum 4.1 Coordinate Witness of Test Activities 4.2 New Functionality & Fixes Verified TEST IT 4.3 Baseline Performance/Functional Verification - Performance Measurements - Computer Human Interface/Command & Control Validates existing system functionality and verifies - Testing new functionality and fixes - Interface Tests Utilizes National Baseline/Generic Adaptation - Degraded Operations Testing Model (as representative of the field as possible) **Test** - System Stability Testing Performed by team, independent of developer, to - Support System Regression Testing include witnesses from the selected Key Site(s) - Verify Information Systems Security Requirements have T&E limitation defined and possible mitigations been met identified - Verify Safety Management System Security Verification that ISS and SMS considerations have Requirements have been met been met 4.4 System/Project Release Documents Complete Key Site coordination 4.5 System/Project Test Discrepancies Identified 4.6 System/Project Test Report 4.7 Key Site Package 4.8 Conduct Pre-Key Site(s) Coordination 4.9 Confirm Impact & Implementation **KEY SITE/NATIONAL DEPLOYMENT** 5.1 Key Site Adaptation Verification of functions that could not be fully 5.2 Key Site Test In-brief evaluated during system test 5.3 Key Site Testing Verification of Key Site local adaptation/patches - Documentation/Procedures Verified Verification of support system(s) - Functional Verification Verification of documentation/procedures **Key Site/National** - Performance and Stability Testing (including regression back to existing baseline) Deployment - Support System Verification Develop user acceptance of test plans/procedures 5.4 Finalize Field Familiarization Plan & "Generic" Upgrade Conduct Key Site Outbrief, including participation by project/system stakeholders 5.5 Conduct Key Site Test Outbrief National delivery package (SSD) finalized and 5.6 Key Site Test Report approved including field familiarization plan and

5.7 Discrepancies/Issues/Actions Documented

5.9 National Delivery Package Approved

5.11 Local Site Adaptation/Patches

5.12 Problem Reporting/Determination

5.10 Joint Memorandum Issued for Release

Deployment

5.8 Facilitate and Participate in Telecon for National

 Problem report determination is monitored and tracked by the support organization

operational field site personnel

"generic" upgrade schedule

Joint memorandum issued for release

Local site adaptation/patches verified by